

**REMARKS**

Entry of the foregoing, reexamination and reconsideration of the application identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.111 and in light of the remarks which follow, are respectfully requested.

At the outset, it is noted that the Notice of References Cited (form PTO-892) issued with the Official Action cites U.S. Patent No. 6,432,094. However, U.S. Patent No. 6,342,094 to *Kabalnov* has been applied by the Patent Office against the present application. Applicants respectfully request the issuance of a Notice of References Cited which cites the correct patent number of *Kabalnov*.

By the above amendments, claims 1-24 have been canceled without prejudice or disclaimer. Claim 25 has been amended to depend from claim 30. New claims 31 to 51 are directed to methods of producing an ink for ink jet recording and depend from claim 30. The addition of new claims 31-51 is supported at least by originally filed claims 4-24, respectively. New claim 52 is directed to an additional aspect of the present invention. Support for this claim can be found in the instant specification at least at page 135, lines 21-25.

In the Official Action, claims 4, 7 and 20 stand rejected under 35 U.S.C. §112, second paragraph, for the reasons set forth at page 2 of the Official Action. This rejection is moot in light of the cancellation of claims 4, 7 and 20, and for at least this reason, withdrawal of this rejection is respectfully requested.

As discussed above, new claims 31 and 47 recite subject matter recited in canceled claims 4 and 20, respectively. In accordance with the Examiner's suggestions, new claim 31 recites the phrase "at least one of a vinyl polymer or a condensation polymer." In addition, new claim 47

recites the phrase "selected from the group consisting of" and also includes the word "and" between formulas S-8 and S-9.

With regard to the recitation of the term "molecular weight" in new claim 34, Applicants submit that such recited term does not relate to the "number average molecular weight" or the "weight average molecular weight" of the ionic group-containing water-insoluble polymer, as suggested by the Patent Office. Rather, the molecular weight as recited in claim 34 relates to the molecular weight of each polymer molecule. This is clear from the plain meaning of the term "molecular weight."

In view of the above, it is apparent that the claims fully comply with the provisions set forth in the second paragraph of 35 U.S.C. §112.

Claims 1-10, 12-14, 19-23, 25, 27 and 30 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,235,096 (*Meyrick et al*) in view of the evidence in U.S. Patent No. 4,665,411 (*Kiritani et al*). Withdrawal of this rejection is respectfully requested for at least the following reasons.

According to one aspect of the present invention as defined by claim 30, a method of producing an ink for ink jet recording is provided. The method comprises the steps of: dispersing colored fine particles, which include at least a hydrophobic high-boiling organic solvent having a boiling point of at least 150 °C and an oil-soluble dye, in an aqueous medium to prepare a colored fine particle dispersion; dispersing by emulsification of an ionic group-containing water-insoluble polymer to prepare a fine particle dispersion; and mixing the fine particle dispersion with the colored fine particle dispersion.

*Meyrick et al* relates to inks and to their use in ink jet printing (col. 1, lines 3 and 4). *Meyrick et al* discloses an ink comprising water, a water-dissipatable polymer and a dye (col. 1, lines 30-32).

*Meyrick et al* does not constitute an anticipation of the presently claimed invention. In this regard, *Meyrick et al* does not disclose mixing a fine particle dispersion with a colored fine particle dispersion, wherein the colored fine particle dispersion is prepared by dispersing colored fine particles, which include at least a hydrophobic high-boiling organic solvent having a boiling point of at least 150 °C and an oil-soluble dye, in an aqueous medium, as recited in claim 30.

In stark contrast with the present invention, *Meyrick et al* discloses preparing an ink by mixing together (i) a solution of a dye in a water-immiscible solvent and (ii) a mixture of a water-dissipatable polymer, water-miscible solvent and optionally water (col. 14, lines 24-28). *Meyrick et al* also discloses preparing an ink by mixing together (i) a solution of a dye in a mixture of a water-miscible solvent and a water-immiscible solvent and (ii) a water-dissipatable polymer and optionally water (col. 14, lines 28-32). In both of the above embodiments of *Meyrick et al*, a solution of a dye in a solvent is mixed with a water-dissipatable polymer. Clearly, such methods are not the same as the inventive method of claim 30 in which a fine particle dispersion is mixed with a colored fine particle dispersion.

As discussed above, the recited colored fine particle dispersion is prepared by dispersing colored fine particles, which include at least a hydrophobic high-boiling organic solvent having a boiling point of at least 150 °C and an oil-soluble dye, in an aqueous medium. *Meyrick et al* simply has no disclosure that the recited colored fine particle dispersion formed by such dispersing step is mixed with a fine particle dispersion, as is presently claimed.

For at least the above reasons, it is clear that *Meyrick et al* does not anticipate one aspect of the present invention as defined by claim 30. Accordingly, withdrawal of the §102(c) rejection is respectfully requested.

Claims 1, 3-6, 8-11, 19-23, 25 and 30 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,246,154 (*Yao*) in view of the evidence in *Kiritani et al*. Withdrawal of this rejection is respectfully requested for at least the following reasons.

*Yao* relates to an ink composition for ink jet recording (col. 1, lines 6 and 7). *Yao* discloses a color ink which utilizes hydrophobic dyes (col. 1, lines 42 and 43).

*Yao* does not constitute an anticipation of one aspect of the present invention as defined by claim 30. In this regard, *Yao* does not disclose mixing a fine particle dispersion with a colored fine particle dispersion, wherein the colored fine particle dispersion is prepared by dispersing colored fine particles, which include at least a hydrophobic high-boiling organic solvent having a boiling point of at least 150 °C and an oil-soluble dye, in an aqueous medium, as recited in claim 30. *Yao* discloses mixing an aqueous suspension containing a polymer with a solution prepared by dissolving a dye in an organic solvent (examples; col. 10, lines 25-30). However, *Yao* has no disclosure of mixing a fine particle dispersion with a colored fine particle dispersion as is presently claimed. In this regard, it is clear that the dye dissolved in an organic solvent disclosed by *Yao* is not the same as the recited colored fine particle dispersion.

Moreover, unlike the recited colored fine particle dispersion, *Yao* has no disclosure that the dye dissolved in an organic solvent thereof is prepared by dispersing colored fine particles, which include at least a hydrophobic high-boiling organic solvent having a boiling point of at least 150 °C and an oil-soluble dye, in an aqueous medium.

For at least the above reasons, *Yao* does not constitute an anticipation of one aspect of the present invention as defined by claim 30. Accordingly, withdrawal of the §102(b) rejection is respectfully requested.

Claim 24 stands rejected under 35 U.S.C. §103(a) as being obvious over *Meyrick et al* or *Yao* in view U.S. Patent No. 6,342,094 (*Kabalnov*). Claim 26 stands rejected as being obvious over *Meyrick et al* or *Yao* in view of U.S. Patent No. 5,302,437 (*Idei et al*). Claims 12-14 and 27 stand rejected as being obvious over *Yao* in view of either of Japanese Patent Document Nos. 03-231975 or 09-059552. Claim 15 stand rejected as being obvious over *Yao* in view of U.S. Patent No. 5,508,421 (*Suzuki et al*). Claims 16, 17 and 28 stand rejected as being obvious over *Yao* in view of either of U.S. Patent Nos. 4,101,541 (*Petitpierre et al*) or 4,016,152 (*Dehnert et al*). Claims 18 and 29 stand rejected as being obvious over *Yao* in view of Japanese Patent Document No. 01-095093. These rejections are moot in light of the cancellation of claims 12-18, 24 and 26-29. For at least this reason, withdrawal of the above rejections is respectfully requested.

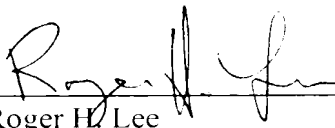
From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

Application No. 09/922,842  
Attorney's Docket No. 003510-106

If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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